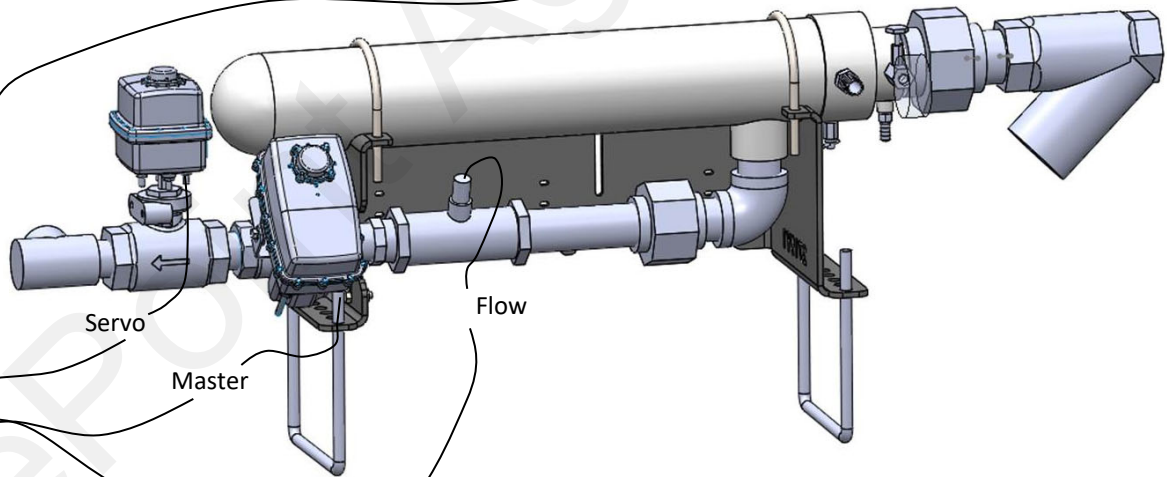
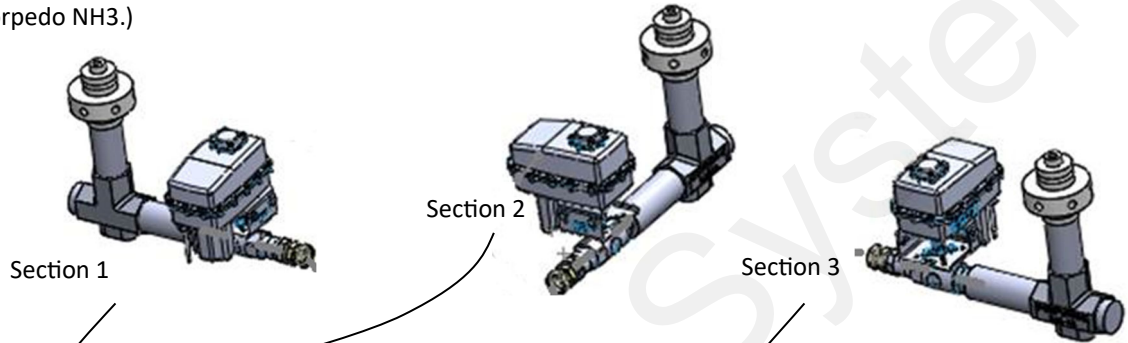




# 396-2786Y1 Torpedo™ NH<sub>3</sub> System For Raven 440/450

Optional Section Valves, up to 3 sections may be used. If no section valves, simply leave section valve connectors capped.  
Use 3 Pin weather pack extension cables to reach section valves as necessary. (Even with the Raven 450, only 3 sections are supported for Torpedo NH<sub>3</sub>.)



207-2713Y1,  
Commander II  
to Torpedo  
NH<sub>3</sub> Cable.

201-2775Y1, Raven 16  
Pin to MT 10 Pin adapter

200-03-18034, Multi Section Master  
Valve Signal Cable (contains master  
signal module in cable)

16 Pin, connect to Raven  
440/450 Controller, use 16  
pin extensions as necessary





# Torpedo™ NH<sub>3</sub> System for Raven 440/450

## Controller Setup Instructions:

### Settings in “Initial Console Programming”

Units: “US”

Speed Sensor: SurePoint harnessing requires you use either a radar speed sensor or GPS speed sensor hooked directly to the Raven Console. The SurePoint Astro GPS speed sensors are compatible with Raven controllers. In the initial console calibration set the Speed setting to “SP2”.

Valve Type: “C-SD” This is the standard valve setting.

### Machine Calibration Settings

BOOM CAL: If using a single section, set Boom 1 to the full machine width in inches. If using 1,2 and/or 3 sections, set all 3 sections to their proper width in inches. Make sure booms 4-6 are all set to zero, they are not used with the SurePoint Torpedo system and Raven Control.

METER CAL: Set to 171. This is pulses / 10 lbs actual Nitrogen. The flow and application rate will be in pounds of actual N. Verify accuracy of flowmeter by comparing the Volume shown on the display with actual weigh tickets. If the weigh ticket amount is more than shown on the display, LOWER the meter cal number. Use the following formula to adjust the meter cal number:

$$(\text{Initial meter cal} \times \text{Volume shown on screen}) / (\text{Weigh ticket amount} \times 0.82) = \text{New meter cal}$$

VALVE CAL: Set to 2123.

1st digit—Valve Backlash 1= short pulse on valve change of direction, 9 = long pulse

2nd digit—Valve Speed 1 = slow, 9 = fast

3rd digit—Brake Point Sets the percentage away from target the valve slows down, 1 = 10%, 9 = 90%

4th digit—Dead Band Allowable difference between target and actual rate, 1 = 1%, 9 = 9%

Set all other values according to Raven 440 or 450 installation and service manual.

